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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|----------------------|----------------------|---------------------|------------------|
| 10/719,683 | 11/24/2003 | Bob Streefkerk | 081468-0306882 | 1907 |
| 909 7590 04/05/2007 PILLSBURY WINTHROP SHAW PITTMAN, LLP P.O. BOX 10500 MCLEAN, VA 22102 | | | EXAMINER | |
| | | | RUTLEDGE, DELLA J | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2851 | |
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| SHORTENED STATUTOR | Y PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE | |
| 3 MO | NTHS | 04/05/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | Application No. | Applicant(s) |
|---|--|---|
| Office Action Occurrence | 10/719,683 | STREEFKERK ET AL. |
| Office Action Summary | Examiner | Art Unit |
| | D. Rutledge | 2851 |
| The MAILING DATE of this communication app Period for Reply | pears on the cover sheet with the c | correspondence address |
| A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE | N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133). |
| Status | | |
| 1) ☐ Responsive to communication(s) filed on <u>09 Jac</u> 2a) ☐ This action is FINAL . 2b) ☐ This 3) ☐ Since this application is in condition for allowed closed in accordance with the practice under Expression in the practice of the | s action is non-final. nce except for formal matters, pro | |
| Disposition of Claims | | |
| 4) Claim(s) 1-3,6-46 and 48-53 is/are pending in 4a) Of the above claim(s) is/are withdray 5) Claim(s) 46-53 is/are allowed. 6) Claim(s) 1-3,6-8,10,14-26, 28,32-45 is/are rejected 7) Claim(s) 9,11-13,27 and 29-31 is/are objected 8) Claim(s) are subject to restriction and/or Application Papers 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomposite and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine | wn from consideration. ected. to. or election requirement. er. epted or b) objected to by the drawing(s) be held in abeyance. Settion is required if the drawing(s) is ob | e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d). |
| Priority under 35 U.S.C. § 119 | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list | s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)). | ion No ed in this National Stage |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail D: 5) Notice of Informal F 6) Other: | ate |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

- 1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 2. Claims 20, 24, 25, 28, 40, 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Meehan et al. (US Pat. 6,556,364)

Meehan et al. have a lens positioning apparatus for aligning a lens in a optical system of a lithographic apparatus. The lens 210 has a joint formed by direct bonding of clean surfaces of the lens 210 and its support 220 using epoxy adhesive and no heating — claims 20, 24, 25, 28,38, 40, 42. The adhesive or epoxy would form a fluid-tight bond or joint.

Claim Rejections - 35 USC § 103

- 3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 4. Claims 1, 6, 8, 10, 14 17, 20, 23 26, 28, 32 37, 42 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida (US Pub. No. 2004/0090607) in view of Holderer et al. (US Pat. No. 6,392,824).

Yoshida has the basic lithographic apparatus with its illumination system, patterning device; substrate support for substrate and projection system. Holderer et al. teach providing a joint between a glass lens and a metal support. The joint comprises a metal solder and an adhesive and a direct bond is formed -1, 6, 7, 8, 10, 14 - 20, 23, 24, 26, 28, 32 - 37, 42 - 45.

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Claims 16, 17, 18, 21, 22, 35 – 37, 41, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meehan et al. (US Pat. No. 6,556,364).

Meechan et al. do not disclose the joint to be liquid or fluid – tight, one of ordinary skill in the art would be motivated to have such a joint because of moisture buildup due to environmental changes to provide a good seal under different environmental conditions.

One of ordinary skill in art would not use any organic sealant that might breakdown in such an environment.

Allowable Subject Matter

- 5. Claims 9, 11 -13, 27, 29 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 6. Claims 46 53 are allowed.

Response Data

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. Rutledge whose telephone number is (571) 272-2127. The examiner can normally be reached on Mon - Thurs, 6:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on (571) 272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Primary Examiner
Art Unit 2851

dr 4/2/07